

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: Unknown )  
Filing Date: Unknown )  
Priority Date: 8 August 2000 )  
Applicants: JESUS, Matey )  
For: IMPROVEMENTS TO ELECTRONIC )  
PROGRAM GUIDE )

**PRELIMINARY AMENDMENT**

Director For Patents  
Box: New Application  
Washington, D.C. 20231

Dear Sir:

This is a preliminary amendment to the enclosed application entitled "Improvements to Electronic Program Guide" claiming priority to British Patent Application No. 0019318.5 filed 8 August 2000..

In the title: change "Programme" to Program".

In the Specification:

Please amend the specification as follows:

Page 1, after the title, insert the following header and paragraph:

**--CROSS-REFERENCE TO RELATED APPLICATION**

This application claims priority to British Patent Application No. 0019318.5 filed 8 August 2000

**BACKGROUND OF THE INVENTION--**

Page 1, lines 13, 17, 19, 26, and 29, change "programmes" to --programs--; lines 15, 23, and 30, change "programme" to --program--.

Page 2, lines 2, 3, 5, 24 and 26, change "programme" to --program--; lines 9, 11, 13, 16, and 18, change "programmes" to --programs--.

Page 2, before line 22, insert the Header:

**--SUMMARY OF THE INVENTION--**

Page 3, lines 3, and 14, change "programme" to --program--; lines 4, 9, 12, 16, 20, 21, 23, 25, 27, and 29 change "programmes" to --programs--, line 6, change "characterised" to --characterized--.

Page 4, lines 1, 2, 5, and 17, change "programmes" to --programs--; lines 7, 8, 14, 16, 18, 20, 21, 22 and 26, change "programme" to --program--.

Page 5, lines 10, 13, 16, 19, 22, and 30 change "programmes" to --programs--; line 21, change "programme" to --program--; line 24, change "A" to --a--.

Page 6, lines 1 and 11, change "characterised" to --characterized--; lines 4, 10, and 14, change "programmes" to --programs--; lines 7, and 22, change "programme" to --program--; before line 16, insert the Header:

**--BRIEF DESCRIPTION OF THE DRAWINGS--**

Page 6, before line 24, add the Header:

**--DESCRIPTION OF THE PREFERRED EMBODIMENTS--**

Page 7, lines 1, 18, and 32, change "programmes" to --programs--; lines 4, 6, 23, 28 and 30, change "programme" to --program--.

Page 8, lines 2, 6, 13, 19, and 25, change "programmes" to --programs--; lines 7, 12, 17, 20, 21, 23, and 28, change "programme" to --program--; after the last line, insert the following paragraph:

--While the invention has been described with a certain degree of particularly, it is manifest that

many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.--

**IN THE CLAIMS:**

1. (Amended) A television system, said system comprising: [including] a display screen [(4)] and a broadcast data receiver [(BDR)] for the reception of data broadcast from a broadcaster at a remote location, said data [comprising] including any or any combination of video, audio and/or auxiliary data, at least part of said data being processed by the broadcast data receiver [BDR] to generate an electronic [programme] program guide [(EPG)], said electronic program guide [EPG] containing information relating to a range of [programmes] programs available for viewing at that instant or in the future, and displaying said electronic program guide [EPG] on the display screen, [characterised in that] wherein the broadcast data receiver [BDR] is provided with a facility allowing a user to select to view from the electronic program guide [EPG], for a pre-determined period of time, a visual display of each, or a predetermined selection, of the [programmes] programs available for viewing at that instant or for a particular time period in the future.

2. (Amended) A television system according to claim 1 [characterised in that programmes] wherein programs viewed using the facility are shown in sequence, each for said pre-determined period of time.

3. (Amended) A television system according to claim 1 [characterised in that the] wherein said pre-determined period of time for which each [programme] program can be viewed is determined by the broadcaster.

4. (Amended) A television system according to claim 1 [characterised in that the] wherein said pre-determined period of time for which each [programme] program can be viewed is determined by the user.

5. (Amended) A television system according to claim 1 [characterised in that] wherein the [programmes] programs available for viewing using the facility are a number of [programmes] programs pre-selected in relation to any user and/or user defined groupings.

6. (Amended) A television system according to claim 5 [characterised in that] wherein the [programmes] programs being shown via the facility are based on the user's [favourite] favorite channel and/or [programme] program list.

7. (Amended) A television system according to claim 1 [characterised in that] wherein the [programmes] programs available for viewing using the facility are a number of [programmes] programs identified on the basis of user defined subject matter input into the system.

8. (Amended) A television system according to claim 1 [characterised in that] wherein the user is able to select a particular [programme] program for watching subsequently at the time of the visual display for that [programme] program being shown.

9. (Amended) A television system according to claim 1 [characterised in that] wherein the user is able to select a particular [programme] program for watching subsequently after the display of all the [programmes] programs.

10. (Amended) A television system according to claim 1 [characterised that] wherein a textual message is generated on screen for each [programme] program being shown via the facility to inform the user of details relating to each of the said [programmes] programs.

11. (Amended) A television system according to claim 1 [characterised in that any or any combination] wherein selections made from the group consisting of selection of the facility, selection of the subject matter to which the [programmes] programs shown via the facility relate, selection of the pre-determined period of time for which the [programmes] programs are shown for and/or selection of a particular [programme] program to subsequently be viewed, are achieved via a remote control device used in conjunction with the [BDR] broadcast data receiver.

12. (Amended) A broadcast data receiver [(BDR)], said broadcast data receiver comprising: being [BDR] connected to or integrally formed with a display screen [(4)], and [said BDR] receiving data from a broadcaster at a remote location, said data [comprising] including any or any combination of video, audio and/or auxiliary data, at least part of said data being processed by the broadcast data receiver [BDR] to generate an electronic [programme] program guide [(EPG)] containing information relating to a range of [programmes] programs for viewing at that instant or in the future and displaying said electronic program guide [EPG] on the display screen, [characterised in that the] wherein said broadcast data receiver[BDR] is provided with a facility allowing a user to select to view from the electronic program guide [EPG], for a pre-determined

period of time, a visual display for each, or a pre-determined selection, of the [programmes] programs available for viewing for a particular time period.

13. (Amended) An electronic [programme] program guide [(EPG)], said electronic program guide comprising: [EPG] being generated by a broadcast data receiver [(BDR)] for display on a display screen [(4)], said electronic program guide [EPG] containing information relating to a range of [programmes] programs for viewing at that instant or in the future, [characterised in that] wherein a facility is provided by the broadcast data receiver [BDR] for selection by a user using the electronic program guide [EPG] allowing the user to select to view, for a pre-determined period of time, a visual display for each, or a pre-determined selection, of the [programmes] programs available for viewing for a particular time period.

14. (Amended) A method of reviewing a number of programmes identified in an [EPG] electronic program guide, said electronic program guide [EPG] being generated from a broadcast data receiver for display on a display screen, said electronic program guide [EPG] containing information relating to a range of [programmes] programs for viewing at that instant or in the future, said method including the steps of a user selecting to view, for a pre-determined period of time, all or a pre-determined selection, of [programmes] programs available for viewing at that instant or for a particular time period in the future, and said broadcast data receiver [BDR] generating visual displays for each of said [programmes] programs in sequence for said pre-determined time periods.

**REMARKS**

Attached are the marked up versions of the claims and new paragraphs as required in Section 1.121(4) (ii).

The application should now be in condition for examination, which is respectfully requested.

Respectfully Submitted

HEAD, JOHNSON & KACHIGIAN

Dated: 3 August 2001

BY: 

Mark G. Kachigian, Reg. No. 32,840

228 West 17th Place

Tulsa, Oklahoma 74119

(918) 584-4187

Attorneys for Applicant

**New Title to be Inserted into Page 1:**  
**IMPROVEMENTS TO ELECTRONIC PROGRAM GUIDE**

**New Header to be Inserted on Page 1, before line 1:**

**--CROSS-REFERENCE TO RELATED APPLICATION**

This application claims priority to British Patent Application No. 0019318.5 filed 8 August 2000

**BACKGROUND OF THE INVENTION--**

**Replacement Paragraphs to be Inserted in Page 1:**

With the advent of digital data technology in relation to broadcast systems, the number of channels which are available to be viewed and programs thereon, at any one time, has proliferated. This means that the traditional referral to printed television program schedules, such as those found in newspapers, magazines and the like, are now no longer capable of showing all of the programs which are available to be selected at any one time or, furthermore, to show any significant information about the programs.

This problem has lead to the development and adoption of what is known as an electronic program guide (EPG) which is generated from auxiliary data received by the broadcast data receiver. The electronic program guide is an on-screen display which can be used to display various options and modes of operation of a broadcast data receiver and, furthermore, programs which are available to be viewed at a particular time at the same instant or in the future and through which pages of display the user can scroll, typically using a remote control device, to view programs available and select a particular program to be watched.



### New Paragraphs to be inserted into Page 2:

This form of EPG is relatively well-known and it is also possible upon the selection of a particular program to obtain limited textual information relating to the program subject matter which can help the user in deciding whether or not to select and watch that particular program. However, very often this additional information is not of sufficient quantity to allow a user to make a decision.

As the EPG has evolved, it is now also possible to search through available programs on a subject matter basis so that, the user can indicate to the broadcast data receiver, typically by the remote control, their interest in programs in relation to particular subject matter. The broadcast data receiver can undertake a survey of available programs, via information data which is broadcast along with the video/audio data, to identify those which relate to the subject matter indicated by the user. If any such programs are identified, then these details are shown on the display screen in the form of textual information describing each of the programs. However, in use, it is found that the information which is provided is not sufficient for the user to decide whether they want to watch a particular channel.

### Header and paragraph to be Inserted into Page 2:

#### SUMMARY OF THE INVENTION

The aim of the present invention is to provide an improved method and system of allowing a user to ascertain the program material which is available for viewing at any one time and then allow the user to select, on the basis of the invention, a particular program which they wish to watch.

**Replacement Paragraphs to be Inserted into Page 3:**

of video, audio and/or auxiliary data, at least part of said data being processed by the BDR to generate an electronic program guide (EPG), said EPG containing information relating to a range of programs available for viewing at that instant or in the future, and displaying said EPG on the display screen, characterized in that the BDR is provided with a facility allowing a user to select to view from the EPG, for a predetermined period of time, a visual display of each, or a predetermined selection, of the programs available for viewing at that instant or for a particular time period in the future.

Typically the programs are being shown on channels and the channels are available for selection using the facility.

In one embodiment, the period for which each program can be viewed is a relatively short period of time, such as for example 5 seconds, and each of the programs is shown in sequence for said predesignated time period

In one embodiment, the programs for which the display is generated is each of the programs which are available for viewing at the instant of the selection of the function.

In a further embodiment of the invention, the programs which are scanned for viewing are a pre-selected number of programs which can be selected in relation to any user or broadcast data receiver defined grouping. In a preferred embodiment the selection of the group of programs is made on the basis of a user entered subject matter instruction so that from the programs which are available at that time, those

#### Replacement Paragraphs for Page 4:

programs which relate to the user defined subject, are identified and then each of the programs which are identified in that group are displayed for a said predetermined period of time.

The ability to show each of the programs selected for a relatively short period of time allows the user to immediately identify what program they may decide to watch in terms of subject matter and/or quality of the program material etc, and it is found that in practise, the ability to view the video image as an alternative or in addition to textual information is of considerably greater benefit to the user than using the conventional system of simply referring to textual information which is generated on screen.

In use, if the user identifies a particular program which is being shown and wishes to watch the same then they may select the same at the time of the video display for that program or may simply wait until all the programs have been shown for the predetermined period of time and then select the program of choice. It is envisaged that in addition to the video data, a caption will be generated which identifies the program and/or program details, such as the channel, the length of time the program is to be shown for and/or the like, which is being shown at a predetermined period of time.

Typically, the selection of the function according to the invention, the selection of subject matter, if desired, and the selection of the particular program to subsequently be viewed, can all be achieved via a remote control device used in conjunction with a broadcast data receiver.

### Replacement Paragraphs for Page 5:

According to a second aspect of the present invention there is provided a method of reviewing a number of programs identified in an EPG, said EPG being generated from a broadcast data receiver for display on a display screen, said EPG containing information relating to a range of programs for viewing at that instant or in the future, said method including the step of a user selecting to view, for a pre-determined period of time, all or a pre-determined selection, of programs available for viewing at that instant or for a particular time period in the future, said BDR generating visual displays for each of said programs in sequence for said pre-determined time periods.

Preferably the user then selects a particular program based on the excerpts of the number of programs displayed visually.

According to a further aspect of the present invention there is provided a broadcast data receiver (BDR), said BDR connected to or integrally formed with a display screen, said BDR receiving data from a broadcaster at a remote location, said data comprising any or any combination of video, audio and/or auxiliary data, at least part of said data being processed by the BDR to generate an electronic program guide (EPG) containing information relating to a range of programs for viewing at that instant or in the future and displaying said

09921849 "080301

Page 6, Before Line 16 Insert the Following Header:

## BRIEF DESCRIPTION OF THE DRAWINGS

Page 6, Before Line 22 Insert the Following Header:

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

Replacement Paragraphs for Page 6:

on the display screen, characterized in that the BDR is provided with a facility allowing a user to select to view from the EPG, for a pre-determined period of time, a visual display for each, or a pre-determined selection, of the programs available for viewing for a particular time period.

According to a yet further aspect of the present invention there is provided an electronic program guide (EPG), said EPG being generated by a broadcast data receiver (BDR) for display on a display screen, said EPG containing information relating to a range of programs for viewing at that instant or in the future, characterized in that a facility is provided by the BDR for selection by a user using the EPG allowing the user to select to view, for a pre-determined period of time, a visual display for each, or a pre-determined selection, of the programs available for viewing for a particular time period.

Figure 3 illustrates the program which is finally selected for viewing by the user in accordance with the invention.

### Replacement Paragraph to be Inserted Into Page 7:

programs on, for example, a television set. In addition, auxiliary data can be received by the broadcast data receiver which allows other functions to be offered to the user. One of these functions is an electronic program guide and it is envisaged that the display shown in Figure 1 will be generated as part of the electronic program guide as follows.

Conventionally, when using a broadcast data receiver, a user is well versed in the use of a remote control device and to generate the display shown in Figure 1, the remote control device will be provided with a particularly identified button which may be entitled, for example, "scan".

Upon depressing the button in accordance with the embodiment herein described, the display shown in Figure 1 will be generated. As will be seen, the display is a menu 2 indicating a range of subject matter. The user can then, via a remote control, decide to select one of the subject matter options indicated or alternatively may go for the final option which is "all" and simply means that all of the programs available at that time can be selected. In this embodiment, the user has selected sports option 6 as being subject matter of interest. It may also be possible at this time for the user to select a particular period of time for which subsequent video images are to be generated from a particular program and, if this is provided, then again the user can use the remote control device to select a particular time period.

In any case, upon receiving an indication that the user has selected the subject matter of sports, the broadcast data receiver refers to a series of information flags which are transmitted by the broadcaster for the data for each program, and these flags serve to indicate to the broadcast data receiver the particular subject matter under which the program falls. Thus, the broadcast data receiver in this instance scans all of the programs which are available for viewing at the pre-

### Replacement Paragraphs for Page 8:

designated time to identify any which include the sports information flag. For those programs which do include this flag, the broadcast data receiver proceeds to generate the video and possibly audio data for the same for sequential display on screen, as illustrated in Figures 2a, b and c. In this example, three programs are identified under the sports heading, namely football as indicated in Figure 2a, horse racing as indicated in Figure 2b, and darts as indicated in Figure 2c. Thus, as shown in these figures, the video and audio for that program is generated for a predesignated period of time, say 5 seconds, which allows the user to view the on-screen display, identify the sports to which the program relates, and they can then do this for each of the available programs for that subject matter at that time, in sequence.

In this example, the user is particularly interested in darts and therefore can choose, via the remote control, to select the darts program at the time of display as shown in Figure 2c or alternatively, they can wait until the viewing of all the excerpts from the selected programs is complete and then select the darts program.

In order to aid the user to identify the program shown, a caption can be generated as shown in each of Figures 2a, 2b and 2c which identifies the program and channel. In a further embodiment, the caption can be enlarged to also display textual information relating to the programs which are being shown for that period of time.

It is therefore found that in use, the ability to view the program rather than having to refer simply to textual information is of considerable advantage to the user.

**New Paragraph for Page 8 to be Inserted After the Last Line:**

While the invention has been described with a certain degree of particularly, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.

1.0E+080" 648F.2660



## Clean Version of the Claims

1. (Amended) A television system, said system comprising: a display screen and a broadcast data receiver for the reception of data broadcast from a broadcaster at a remote location, said data including any or any combination of video, audio and/or auxiliary data, at least part of said data being processed by the broadcast data receiver to generate an electronic program guide], said electronic program guide containing information relating to a range of programs available for viewing at that instant or in the future, and displaying said electronic program guide on the display screen, wherein the broadcast data receiver is provided with a facility allowing a user to select to view from the electronic program guide, for a pre-determined period of time, a visual display of each, or a predetermined selection, of the programs available for viewing at that instant or for a particular time period in the future.
2. (Amended) A television system according to claim 1 wherein programs viewed using the facility are shown in sequence, each for said pre-determined period of time.
3. (Amended) A television system according to claim wherein said pre-determined period of time for which each program can be viewed is determined by the broadcaster.
4. (Amended) A television system according to claim 1 wherein said pre-determined period of time for which each program can be viewed is determined by the user.
5. (Amended) A television system according to claim 1 wherein the programs available for viewing using the facility are a number of programs pre-selected in relation to any user and/or user defined groupings.

7. (Amended) A television system according to claim 1 wherein the programs available for viewing using the facility are a number of programs identified on the basis of user defined subject matter input into the system.

8. (Amended) A television system according to claim 1 wherein the user is able to select a particular program for watching subsequently at the time of the visual display for that program being shown.

9. (Amended) A television system according to claim 1 wherein the user is able to select a particular program for watching subsequently after the display of all the programs.

10. (Amended) A television system according to claim 1 wherein a textual message is generated on screen for each program being shown via the facility to inform the user of details relating to each of the said programs.

11. (Amended) A television system according to claim 1 wherein selections made from the group consisting of selection of the facility, selection of the subject matter to which the programs shown via the facility relate, selection of the pre-determined period of time for which the programs are shown for and[/or] selection of a particular program to subsequently be viewed, are achieved via a remote control device used in conjunction with the broadcast data receiver.

12. (Amended) A broadcast data receiver, said broadcast data receiver comprising: being connected to or integrally formed with a display screen and receiving data from a broadcaster at a remote location, said data including any or any combination of video, audio and/or auxiliary data, at least part of said data being processed by the broadcast data receiver to generate an electronic program guide containing information relating to a range of programs for viewing at that instant or in the future and displaying said electronic program guide on the display screen, wherein said broadcast data receiver is provided with a facility allowing a user to select to view from the electronic program guide, for a pre-determined period of time, a visual display for each, or a pre-determined selection, of the programs available for viewing for a particular time period.

13. (Amended) An electronic program guide, said electronic program guide comprising: being generated by a broadcast data receiver for display on a display screen, said electronic program guide containing information relating to a range of programs for viewing at that instant or in the future, wherein a facility is provided by the broadcast data receiver for selection by a user using the electronic program guide allowing the user to select to view, for a pre-determined period of time, a visual display for each, or a pre-determined selection, of the programs available for viewing for a particular time period.

14. (Amended) A method of reviewing a number of programs identified in an electronic program guide, said electronic program guide being generated from a broadcast data receiver for display on a display screen, said electronic program guide containing information relating to a range of programs for viewing at that instant or in the future, said method including the steps of a user selecting to view, for a pre-determined period of time, all or a pre-determined selection, of programs available for viewing at that instant or for a particular time period in the future, and

said broadcast data receiver generating visual displays for each of said programs in sequence for said pre-determined time periods.